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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,599	08/16/2001	C.W. Luttrell	REEL:0021--2/YOD 99RE166-	3929
7590 06/29/2004			EXAMINER TUGBANG, ANTHONY D	
Alexander Gerasimow Allen-Bradley Company Patent Dept., 704P Floor 8 T29 1201 South Second Street Milwaukee, WI 53204			ART UNIT 3729	
DATE MAILED: 06/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,599

Applicant(s)

LUTTRELL, C.W.

Examiner

A. Dexter Tugbang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The applicant(s) amendment filed on 4/7/04 has been fully considered and made of record.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. The rejections below are maintained and hereby repeated for the applicant(s) convenience.

Claim Rejections - 35 USC § 102

4. Claims 34, 37, 38, 41, 44 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Linkous 3,333,329.

Regarding Claim 34, Linkous discloses a method of making an electrical motor stator comprising: inserting a first coil group 33 capable of being used for a first electrical phase via an insertion tool or a machine (see col. 4, lines 38-44); inserting a first coil group 34 capable of being used for a second electrical phase; inserting a first coil group 35 capable of being used for a third electrical phase; inserting a second coil group 38 capable of being used for the first electrical phase; inserting a second coil group 39 capable of being used for the second electrical phase; and inserting a second coil group 40 capable of being used for the third electrical phase. In Figure 1, Linkous shows that each of the coil groups are inserted and extend from both a front end and a back end of the stator core in which the back end is opposite to the front end. This front end and back end can be broadly read as the claimed “first end” and “second end”,

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respectively, where each of the coil groups is inserted by the insertion tool through each of the front end and the back end. It is noted that the first, second and third electrical phases are recited as functional language that does not provide any manipulative difference to the claimed manufacturing method.

Regarding Claim 41, the recitations of the claimed “first” through “sixth” coil groups are similarly recited in Claim 34 with the claimed “first coil” groups and “second coil” groups. Each claim requires six coil groups and accordingly, the coil groups 33-35 and 38-40 can alternatively be read as being equivalent to the claimed “first” through “sixth” coil groups, respectively.

Regarding Claims 37 and 44, each coil group comprises individual leads 16 which exit the stator core from both the first and second ends.

Regarding Claims 38 and 45, each coil group of Linkous includes multiple windings of individual leads 16 that are disposed singularly in one winding slot with a plurality of windings of leads 16 disposed in other winding slots shared with windings of a different coil group (see Fig 3).

Claim Rejections - 35 USC § 103

5. Claims 39, 40, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linkous in view of Kawamura et al 5,231,324.

Linkous discloses the claimed manufacturing method as previously discussed and further including at least one example of a two-pole stator (see col. 4, line 38). Linkous does not teach that each coil group has two windings disposed singularly in a respective winding slot and four

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windings disposed in respective winding slots shared with windings of a different coil to form a three-phase stator, or a stator having first, second and third phases.

Kawamura a winding arrangement in a number of different embodiments, all of which are to manufacture a three-phase stator, with each coil group having more than one winding disposed in a respective winding slot and at least four other windings disposed in respective winding slots shared with windings of different or other coil groups (see at least the examples of Figs. 16, 17 and 24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Linkous by utilizing the winding arrangement taught by Kawamura, to produce an art recognized equivalent electrical motor stator having three-phases, i.e. first, second and third, phases, with at least two poles.

Response to Arguments

6. Applicant's arguments filed with the amendment on 4/7/04 have been fully considered, but have not been deemed to be found as persuasive.

In regards to the merits of Linkous, the applicant(s) assert that each of Claims 34 and 41 require six coil groups and that Linkous does not teach six coil groups, but only shows two coil groups in one embodiment and only four coil groups in a second embodiment.

The examiner most respectfully disagrees. The examiner has broadly interpreted the term "group" as one, individual coil where the six coil groups of Linkous can be read as coils 33-35 and 38-40, respectively. While the meaning of coil groups can also mean more than one coil, a group of coils can consists of only one, single coil in the motor art. As evidence, the examiner

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cites the references to Linkous (U. S. Patent 4,095,332) and Arnold (U. S. Patent 3,886,653). Linkous (at col. 2, lines 12-14) and Arnold (at col. 7, lines 1-5) each teach that a group can consists of one coil. These references are not being utilized in the rejection above, but are merely being cited to show that a coil group can consists of one, single coil in the motor art.

The applicant(s) further argue that Linkous does not teach that the leads for the coil group exits the same side of the stator core (as required by Claim 41) or that the leads exit both or alternative first and second ends of the stator core (as required by Claim 34).

The examiner again most respectfully traverses in that each coil of Linkous is made of wound leads or wound wires. In Figure 6, Linkous shows these leads of each coil group exit out of one end, i.e. first end, of the stator core. In Figure 12, Linkous shows that the leads of each coil group exit out of one end, i.e. first end, and also out of another end opposite to the one end, i.e. second end, of the stator core. So yes, the leads of the coil groups each exit out of both a first end and a second end opposite to the first end of the stator core.

Therefore, the manner in which the examiner has interpreted Linkous with the number of coils corresponding to the number of coil groups is considered to be proper and thus, the rejection above is maintained.

Allowable Subject Matter

7. Claims 35, 36, 42 and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

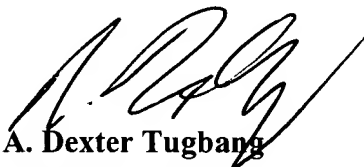
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A. Dexter Tugbang
Primary Examiner
Art Unit 3729

June 24, 2004